AMENDMENTS TO THE CLAIMS:

1. (Currently amended) A method of color matching images generated by multiple projectors of a tiled projection display system, ~~each projector having a processing unit and the system having a main controller,~~ comprising the steps of:

providing at least two projectors, each having ~~storing~~ chromaticity data ~~in the processing unit of each projector,~~ representing a color gamut of ~~at least the colors of images generated by~~ that projector stored therein;

communicating each projector's chromaticity data to a [[~~the~~]] main controller;

determining a standard color gamut achievable by each said projector;

~~storing standard color gamut data at the main controller, representing a standard color gamut to which the projectors are to be matched;~~

calculating~~, at the main controller,~~ color correction data for each projector, based on that projector's chromaticity data and on [[~~the~~]] said standard color gamut [[~~data~~]]; and

~~communicating each projector's color correction data from the main controller to that projector; and~~

calculating image pixel values~~, using the processing system of each projector, on the basis of that projector's~~ based on input image data and said color correction data.

2. (Currently amended) The method of Claim 1, ~~wherein the~~ said providing step comprising providing ~~chromaticity data further represents~~ luminance data ~~of images generated by the projector~~.

3. (Currently amended) The method of Claim 1, ~~further comprising the steps of~~ wherein:

said providing step comprising providing ~~storing projector relative~~ luminance data ~~in the processing unit of each projector,~~ representing the relative luminance of colors generated by [[~~that~~]] each projector; and

~~of storing standard relative luminance data at the main controller, representing a standard relative luminance of colors to which the projectors are to be matched; and wherein the communicating step is performed by also communicating this projector relative luminance data; and the~~ said calculating step is performed such that the color

correction data is further based on the ~~projector relative~~ luminance data.

4. (Currently amended) The method of Claim 3, ~~wherein the projectors each use a color wheel, and~~ wherein said storing ~~relative~~ luminance data represents effective light times of each color of a color wheel used by said projector.

5. (Currently amended) The method of Claim 1, further comprising the step of storing additional data representing the luminance of a light source of each projector, ~~and wherein the communicating step is performed by also communicating this luminance data,~~ and further comprising the step of adjusting the gain of the color correction data based on the ~~luminance~~ additional data.

6. (Currently amended) The method of Claim 1, comprising ~~wherein the step of~~ communicating each projector's chromaticity data ~~is performed by communicating the data~~ in the form of a transfer function matrix.

7. (Currently amended) The method of Claim 1, ~~wherein the~~ comprising calculating said chromaticity data ~~is calculated~~ from primary and white color values.

8. (Currently amended) The method of Claim 1, ~~wherein the main controller is~~ said determining and calculating color correction data steps performed by at least one component selected from the group consisting of: a processing system in data communication with each projector, and at least one projector functioning at least partially as the main controller.

9. (Currently amended) The method of Claim 1, said determining and calculating color correction data steps performed by one of said projectors ~~wherein the main controller is also one of the projector processing units~~.

10. (Currently amended) The method of Claim 1, comprising generating ~~wherein each projector generates~~ images using a spatial light modulator.

11. (Currently amended) The method of Claim 1, ~~wherein the~~ comprising calculating said color correction data ~~is derived~~ from primary and secondary colors.

12. (Currently amended) A ~~projector for a tiled projection display system, the~~ display system ~~having a main controller,~~ comprising:

~~a set of~~ at least two projectors, each said projector operable to generate a portion

of an image~~, and each projector having a light path along at least the following elements: a light source, a color wheel, a spatial light modulator, and a projection lens, each projector further having a processing unit for processing pixel values for image data to be delivered to the spatial light modulator~~; and

~~wherein each processing unit stores~~ chromaticity data stored in each said projector ~~associated with that processor~~; and

wherein [[~~each~~]] at least one of said at least two projectors ~~processor~~ is operable to deliver the chromaticity data to [[~~the~~]] a main controller, to receive color correction data from [[~~the~~]] said main controller, and to calculate pixel values based on [[~~the~~]] said color correction data.

13. (Currently amended) The ~~projector~~ display system of Claim 12, ~~wherein the spatial light modulator is~~ at least one of said at least two projectors comprising a digital micro mirror device.

14. (Currently amended) The ~~projector~~ display system of Claim 12, wherein the chromaticity data represents both color and luminance of images generated by at least one of said at least two projectors ~~the spatial light modulator~~.

15. (Currently amended) The ~~projector~~ display system of Claim 12, wherein at least one projector of said at least two projectors ~~the processing unit~~ further stores and delivers relative luminance data representing relative luminance of colors generated by said at least one of said projectors ~~the projector~~.

16. (Currently amended) The ~~projector~~ display system of Claim 15, wherein the relative luminance data represents effective light times of said at least one projector of said at least two projectors ~~color wheel~~.

17. (Currently amended) The ~~projector~~ display system of Claim 12, wherein ~~the processing unit~~ at least one projector of said at least two projectors comprises a light source and further stores and delivers luminance data representing luminance characteristics of the light source.

18. (Currently amended) The ~~projector~~ display system of Claim 12, wherein the color correction data is derived from primary and secondary colors.

19. (Currently amended) A projector ~~for a tiled projection display system, the display system having a main controller,~~ comprising:

a ~~set of projectors, each~~ projector ~~operable to generate a portion of an image, and each projector having a light path along at least the following elements: a light source, two or more spatial light modulators, and a projection lens, each projector further~~ having a processing unit for processing pixel values for image data to be delivered to the spatial light modulator; and

wherein each ~~processing unit~~ projector stores chromaticity data associated with said projector ~~that processor~~; and

wherein each ~~processor~~ projector is operable to deliver the chromaticity data to a [[~~the~~]] main controller, to receive color correction data from the main controller, and to calculate pixel values based on the color correction data.

20. (Original) The projector of Claim 19, wherein the spatial light modulator is a digital micro mirror device.

21. (Original) The projector of Claim 19, wherein the chromaticity data represents both color and luminance of images generated by the spatial light modulator.

22. (Currently amended) The projector of Claim 19, wherein the ~~processing unit~~ projector further stores and delivers luminance data representing luminance characteristics of the light source.

23. (Original) The projector of Claim 19, wherein the color correction data is derived from primary and secondary colors.